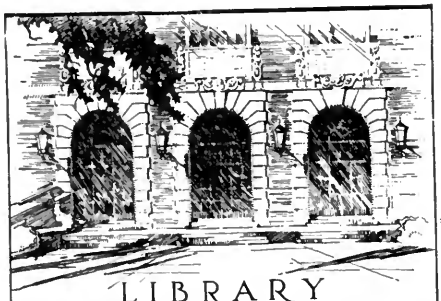

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A NEW TURTLE FROM THE PALEOCENE OF COLORADO

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A number of fossil shells of turtles were collected from the Paleocene beds of western Colorado by Messrs. Bryan Patterson and James H. Quinn (with various friends and associates) in 1932 and subsequent years. One of these, collected in 1941, is immediately recognizable as a trionychid, closely allied to *Aspideretes puercensis* of the early Paleocene Puerco beds of New Mexico. I am again indebted to Messrs. Patterson and Quinn for aid in the study of the specimen in question. Though a nearly complete carapace, it was in such friable condition when found that its preservation offered unusual difficulties, necessitating permanent plaster backing. Mr. Quinn's skillful preparation nevertheless very well exhibits the carapacial characters.

The new form agrees with *Aspideretes puercensis* in the complete separation of the nuchal from the first costal by an excavation that extends to the preneural. This is plainly a secondary character; as these two species represent a distinct phyletic branch, off the main line of evolution of the Trionychidae, it is useful to distinguish them generically from *Aspideretes*.

Class **Reptilia**

Order **Testudinata**

Family **Trionychidae**

Paleotrionyx gen. nov.

Diagnosis.—Distinguished from *Aspideretes* by the complete separation of the nuchal from the first costal bones (except at the end of the rib), the excavation extending to the preneural. Otherwise with the characters of *Aspideretes*.

Type.—*Paleotrionyx quinni* sp. nov.

Paleotrionyx quinni sp. nov.

Holotype.—Chicago Natural History Museum No. P26441, a carapace with one side essentially complete. Found by Alfred A. Look, Jr.

Horizon and type locality.—Plateau Valley beds, late Paleocene; 2½ miles west of DeBeque, Mesa County, Colorado (one-half mile west of the Finley Ranch House).

Diagnosis.—A large trionychid with a flat rugose portion of the carapace ending laterally with an abrupt margin bordered by a smooth strip, set below the level of the rugose disk, from which the ribs extend. Nuchal broadly in contact with the rib-end of the first costal, otherwise separated from the first costal by an excavation that reaches the large preneural. Distinguished from *Paleotrionyx puercensis* by its much more elongate neurals.

Description of type.—Carapace very flat from side to side and apparently also from front to rear, about 700 mm. in length on the mid-line, and 410 at the widest point of the disk, the rib-ends projecting at least 160 mm. on each side in addition. Nuchal large and transverse, widely separated from the body of the first costal but in contact with the ends of its rib-extensions; only the posterior median portion involved in the rugosity of the dorsal disk; the lateral wings each with a ridge on the dorsal surface. Disk very rugose, with ridges tending to be parallel to the sides; rugosity ending abruptly at an edge raised above the level of a smooth margin, 30 mm. wide, that is continuous with the projecting rib-ends. Preneural much broader than long, with free lateral edges. Second and third neural more elongate than in *puercensis*. Free end of rib on third costal very long. Eighth costal very small (incomplete). Neurals narrowing to the seventh, which is wedge-shaped, the second longest.

MEASUREMENTS

	Length mm.	Width mm.
Nuchal	92	370
Preneural	68	86
Neurals		
First	66	48
Second	86	48
Third	81	41
Fourth	76	43
Fifth	64	40
Sixth	59	40
Seventh	60	21

Discussion.—The two species of *Paleotrionyx* may be distinguished as follows:

FIG. 1. Dorsal aspect of carapace of *Paleotrionyx quinni* sp. nov.

1. No step-like depression of the smooth rim of the carapacial disk below the level of the rugose surface; neurals normal, hexagonal; a rib-like thickening of the nuchal on its lower surface ..... *puercensis.*
2. Smooth rim of the carapacial disk set abruptly below the level of the rugose surface; neurals elongate; rib-like thickening of the nuchal on its upper surface ..... *quinni.*

The Paleocene species of *Aspideretes* (Gilmore, 1942) are *sagatus, reesidei, vegetus, quadratus,* and *perplexus* of the Puerco, *singularis* of the Torrejon beds of New Mexico, *superstes* of the Paskapoo of Alberta, *subquadratus* of the Ravenscrag of Saskatchewan, and *nassau* from the Fort Union beds of Montana. In all of these in which the nuchal is known, it is in contact with the first costal throughout its length. *Aspideretes nassau* is known only from the posterior part of the carapace, and thus can not be allocated with certainty to either *Paleotrionyx* or *Aspideretes.* It may be retained as *Aspideretes? nassau* as in Hay's original description. None of the numerous species of *Aspideretes* from the Cretaceous exhibit the generic character of *Paleotrionyx.*

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